

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

What is claimed is:

1. **(Presently Amended)** A monitoring unit comprising:
 a power supply;
 a sensor electrically connected to said power supply, said sensor capable of emitting an energy signal, receiving the emitted energy signal and generating an output;
 monitoring electronics connected to the sensor output including a microprocessor, firmware memory for storing a program for the microprocessor and data memory, the monitoring electronics detecting and recording changes in the energy signal sensor output as a triggering event; and
 a radio transmitter for transmitting information on the triggering event supplied by the monitoring electronics, the information including an identifier for the monitoring unit.

2. **(Original)** The monitoring unit of claim 1 further comprising a radio receiver for receiving commands and data from a reader.

3. **(Original)** The monitoring unit of claim 1 further comprising means for placing the microprocessor in a sleep mode and an interrupt driven timer which periodically wakes the microprocessor out of sleep to execute monitoring activity.

4. **(Previously Presented)** The monitoring unit of claim 2 further comprising means for monitoring the sensor output using parameters which control thresholds used to determine whether changes in the output of the sensor constitute a triggering event and means for reading the parameters from commands received by the radio receiver.
5. **(Previously Presented)** The monitoring unit of claim 1 further comprising means for recording each triggering event along with a timestamp on a timeline and means for transmitting the timeline to the reader upon receiving a command.
6. **(Previously Presented)** The monitoring unit of claim 2 further comprising means for receiving data from the reader as a container identifier, the container identifier being associated with a container to which the monitoring unit is attached and means for transmitting the container identifier to the reader upon receiving a command.
7. **(Previously Presented)** The monitoring unit of claim 1 further comprising means for transmitting a sensor identifier to the reader upon receiving a command, the sensor identifier specifying a type of the sensor.
8. **(Original)** The monitoring unit of claim 2 further comprising means for changing the identifier for the monitoring unit based on a command received from a reader.

9. **(Original)** The monitoring unit of claim 1 further comprising means transmitting information on each triggering event in realtime.

10. **(Presently Amended)** A method of monitoring cargo in a shipping container comprising the steps of:

attaching a monitoring unit to an inside surface of the shipping container, the monitoring unit including a sensor, monitoring electronics and a radio transmitter;

utilizing said sensor to emit energy;

utilizing said sensor to receive energy;

upon receiving a radioed start command from a reader, commencing logging data on triggering events in a memory of the monitoring unit with a time stamp, a triggering event being a change in the energy characteristics between transmission and reception by an output of the sensor, and

upon receiving a radioed get-response command from a reader, transmitting the data on triggering events to the reader.

11. **(Previously Presented)** The method of monitoring cargo in a shipping container of claim 10 further comprising the steps of :

storing a cargo identifier received in a store-identifier command from the reader; and transmitting the cargo identifier upon receiving a read-identifier command from the reader.

12. **(Previously Presented)** The method of monitoring cargo in a shipping container of claim 10 further comprising placing a microprocessor in a sleep mode, setting an interrupt driven timer to wake up the microprocessor after a elapsed period of time to resume monitoring operations.

13. **(Previously Presented)** The method of monitoring cargo in a shipping container of claim 10 further comprising periodically measuring an environmental parameter, recording a value of the environmental parameter in memory and transmitting recorded values of the environmental parameter upon receiving a command from a reader.

14. **(Original)** The method of monitoring cargo in a shipping container of claim 11 further comprising the steps of transmitting a sensor identifier upon receiving a read-sensor-identifier command from the reader, the sensor identifier indicating a type of sensor.

15. **(Previously Presented)** The method of monitoring cargo in a shipping container of claim 10 further comprising the steps of receiving a command with sensor parameters and using the sensor parameters to determine when a triggering event has occurred by filtering the sensor output according to the parameters.

16. **(Cancelled)** Please delete.

17. **(Presently Amended)** A monitoring unit comprising:
a power supply;

a sensor electrically connected to said power supply, said sensor capable of emitting energy, receiving the emitted energy and generating an output;

monitoring electronics connected to the sensor output, the monitoring electronics detecting and recording changes ~~in between~~ the emitted and received energy sensor output as a triggering event; and

a radio transmitter for transmitting information associated with the monitoring unit upon the occurrence of a triggering event supplied by the monitoring electronics, the information including an identifier for the monitoring unit.

18-19. **(Cancelled)** Please delete.

20. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor is capable of emitting and receiving a signal.

21. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor signal is an IR signal.

22. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor signal is an ambient light signal.

23. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor is an ambient light sensor.

24. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor is a proximity sensor.

25-30. (Cancelled) Please delete.

31. (Presently Amended) The method of claim 33 ~~30~~, further comprising the step of commencing logging data regarding the compartment upon a triggering event.

32. (Previously Presented) The method of claim 31, wherein said triggering event is a change in output from the sensor.

33. (Presently Amended) A method for monitoring a transport storage compartment, said method comprising the steps of:

positioning a monitoring unit having a sensor and a transmitter inside said storage compartment;

utilizing said sensor to monitor the physical condition of the inside surface of the storage compartment; and

utilizing said transmitter to transmit a signal based on the physical condition of the inside surface of the storage compartment,

wherein the step of utilizing said sensor to monitor the physical condition of the inside surface of the storage compartment comprises The method of claim 30, further comprising the step of monitoring the ambient light within the compartment.

34. (Presently Amended) A method for monitoring a transport storage compartment, said method comprising the steps of:

positioning a monitoring unit having a sensor and a transmitter inside said storage compartment;

utilizing said sensor to monitor the physical condition of the inside surface of the storage compartment; and

utilizing said transmitter to transmit a signal based on the physical condition of the inside surface of the storage compartment,

wherein the step of utilizing said sensor to monitor the physical condition of the inside surface of the storage compartment comprises ~~The method of claim 30, further comprising the step of~~ emitting a signal from said sensor to reflect on an inside surface of said compartment.

.35. **(Previously Presented)** The method of claim 34, further comprising the step of utilizing said sensor to receive a signal reflected by said inside surface.

36. **(Previously Presented)** The method of claim 34, wherein said inside surface is an access port to said surface.

37. **(Presently Amended)** The method of claim ~~34~~ 30, further comprising the step of commencing logging data regarding the compartment upon a triggering event.

38-39. **(Cancelled)** Please delete.

40. **(Cancelled)** Please delete.

41. **(Previously Presented)** The monitoring unit of claim 1, wherein said sensor is a reflective energy sensor.